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Ms. E. Parker prepared the habitus illustrations and the photomicrographs were produced on the auto-scan at the University of California, Davis, with the assistance of Mr. R. O. Schuster.

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SCIENTIFIC NOTE

Distribution and ecology of Leistus ferruginosus Mannerheim (Coleoptera: Carabidae).—Leistus ferruginosus is the only widespread American Leistus. Its range as given by Erwin includes portions of Alaska, British Columbia, Washington, Oregon, and possibly California. There is one record from western Alberta. Most published records are coastal; the following inland localities may be isolated, relict populations: Jasper, Alberta; Mt. Revelstoke, British Columbia; and Mt. Bonaparte, Okanagon Co., Washington. The following new record extends the known range to western Montana: MONTANA: Ravalli Co., 5 miles SW Florence 3700', June 27, 1967, Loren Russell collector. The single specimen is in the University of Washington collection. This locality is approximately 350 miles southeast of both Mt. Revelstoke and Mt. Bonaparte.

All of the Oregon localities given by Erwin (1970, Pan-Pac. Entomol., 46: 111-119) are located west of the Willamette Valley, with five of the six strictly coastal. The following record establishes the presence of *L. ferruginosus* in the Oregon Cascade Range: OREGON: Marion Co., Silver Creek Falls State Park, June 26, 1972, Loren Russell collector.

Erwin (loc cit) saw specimens collected between May and August, with one teneral specimen taken in June suggesting adult hibernation. I have found this species active between April 4 (Seattle, Wash.) and September 20 (Whatcom

Co., Wash.). A teneral specimen was taken April 22 (Seattle), so that larval hibernation may also occur in this species.

Lindroth (1961. Opusc. Entomol., Suppl. 20: 1–200) has described the habitat of *L. ferruginosus* as "on moderately moist, half shaded ground usually near running water." I have found it in such situations though usually away from water, but also in the following habitats: at the edge of a snowfield (Whatcom Co., Wash., Hannegan Pass 3000′, Sept. 30); under large rubble constantly drenched by spray of a waterfall (Marion Co., Ore., Silver Creek Falls); and on the seabeach near the mouth of a small tidal creek in association with *Dyschirius obesus* LeC. and *Bembidion tigrinum* LeC. (Clatsop Co., Ore.). At the first two localities cited the *Leistus* were associated with staphylinids of the genus *Phlaeopterus*. Although the maritime occurrence may have been untypical, it appears that *L. ferruginosus* can survive in a variety of microthermal habitats.

An unusual behavioral characteristic which seems to have escaped notice is the pronounced tendency of *L. ferruginosus* to ascend moist, shaded vegetation. I have swept or beaten this species from salmon berry (*Rubus spectabilis* Pursh) thickets in Washington and Oregon. Eleven specimens were taken in 20 minutes sweeping at sunset (Coos Co., Ore.), including one hand-collected approximately 1 meter above the ground. Scansorial behavior is somewhat surprising in the terrestrial Nebriini, though similar behavior has been noted in the cychrine *Scaphinotus angusticollis* Mnh. in coastal forests (Van Dyke, 1944. Entomol. Amer., 24: 1–9).

Unless stated otherwise, all records are based on material in the author's collection.—Loren Russell, 828 NW 27th Street, Corvallis, Oregon 97330.

Ecological Notes on Chagas' Zoonosis in New Mexico.—While recording the biogeographical distribution of Chagas' zoonosis and triatome insect vectors in New Mexico, Wood & Wood (1961, Amer. J. Trop. Med. & Hyg., 10: 155–65) reported a collection from Chaco Canyon National Monument of 11 Triatoma protracta protracta (Uhler), which were renamed Triatoma protracta navajoensis Ryckman (Ryckman, 1962, Univ. Calif. Publ. Entomol., 27: 114–15). Deducting those specimens named T. p. navajoensis, Table 1 of Wood & Wood (1961, loc. cit.) should now read 445 T. p. protracta collected, 436 examined and 16 or 3.8% infected instead of 456-442-18-4%. Corresponding data for the T. p. navajoensis in 1961 should be 11, 6, and 2 or 33% infected. The Navajo conenose bug has been known for its annoyance to man in Chaco Canyon since 1952 when 1 β and 1 ♀ naturally-infected with Trypanosoma cruzi Chagas were received from L. P. Arnberger (Wood, 1953, Bull. So. Calif. Acad. Sci., 52: 57–60; 56: 51, 99). The first T. p. navajoensis reported infected with T. cruzi in Utah was from a cabin in Wayne County (Ryckman, 1962, loc. cit.).

During the summers of 1962 and 1963, we investigated conenose bug annoyance to humans at Chaco Canyon, which yielded additional data. Cooperative collecting by all personnel at the Monument produced 18 T. p. navajoensis in 1962 and 9 in 1963. Single specimens received in 1961 and 1964 raised the total for the Chaco Canyon personnel living areas to 40 (15 δ , 22 \circ , 3 5th instar nymphs) with 34 (13 δ , 18 \circ , 3 5th instar nymphs) examined including 8 (2 δ , 6 \circ) or 23.5% infected with $Trypanosoma\ cruzi$. Four T. p. navajoensis were taken from house trailers and 24 from houses. These included infected bugs: 1 δ , 1 \circ in bedrooms and 1 \circ in bathroom, and uninfected bugs: 1 δ , 4 \circ , 1 5th instar